BRUHATH BENGALURU MAHANAGARA PALIKE,DASARAHALLI ZONE

Office of Executive Engineer

SCHEDULE -B

Name Of Work: Construction of R O Plant in ward no 12 Shettyhalli Sub Division

Sl. NO	Descrption of Work	Unit	Qty	Sanctioned Rate	
				In Figures (Rs.)	In Wards (Rs.)
1	Earthwork excavation for foundation of buildings, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications and as per the direction of Engineer in-charge of the work.	Cum	25.28	193.00	
2	Providing and laying in position plain cement concrete of mix 1:4:8 with OPC cement @ 180kgs, with 40mm and down size graded granite metal coarse aggregates @0.85cum and fine aggregates @ 0.57cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation, including cost of all materials, labour, HOM of machinery, curing etc, complete as specifications and as per the direction of Engineer-in-charge of the work.	Cum	4.45	4973.00	
3	Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing etc, complete as specifications and as per the direction of Engineer-in-charge of the work.	Cum	3.96	4278.00	
4	Providing and constructing granite / trap / basalt size stone masonry in basement with cement mortar 1:6, edges of stones chistle dressed in courses not less than 15 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing etc, complete as specifications and as per the direction of Engineer in-charge of the work.	Cum	2.23	5114.00	

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5	Filling available excavated earth (excluding rock) in sides of foundations upto plinth in layers not exceeding 20cms, in depth, compacting each deposited layers by ramming after watering with lead upto 50m, and lift upto 1.5m, including cost of all labour etc, complete as specifications and as per the direction of Engineer-in-charge of the work.	Cum	25.28	130.00	
6	Providing and constructing load bearing wall with solid concrete blocks of size 400x150x200 mm having block density not lessthan 1800 kg/m3 and having a minimum average compressive strength 4.00 N/mm2 confirming to IS 2185 (Part) : 2005 and constructed with CM 1:4 , as per IS 2572:2005 including cost of all materials, labour charegs, scaffolding, curing etc, complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	39.07	927.00	
7	Providing and laying cement concrete using 20 mm and down size granite coarse aggregates and fine aggregates of ready mixed concrete (RMC) M 20 for R.C.C works laid in 15 cms thick layers and well compacted vibrating, curing, for raft foundation column footing , main and secondary beams with all lead and lifts etc., complete (exclusive of cost of steel and fabrication charges.) complete as specifications and as per the direction of Engineer-in-charge of the work.	Cum	10.06	6007.00	
8	Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as specifications and as per the direction of Engineer-in-charge of the work.	Tonne	2.25 3.40	61928.00	
9	Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth cills and string courses cost of all materials, labour complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	73.63	299.00	

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	Providing 12mm thick cement plaster in single coat with cement mortar 1:3, to ceiling including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	23.29	197.00	
11	Providing 20mm thick cement plaster in single coat with cement mortar 1:6, to stone masonry & concrete surface including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	41.31	213.00	
12	Providing lime rendering for plastering to wall and ceiling, including cost of materials, labour, curing complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	64.60	26.00	
13	Providing 18mm thick cement plaster in single coat with cement mortar 1:6, to brick masonry including rounding off corners wherever required smooth rendering, : Providing and removing scaffolding, including cost of materials, labour, curing complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	58.56	202.00	
14	Providing and applying two coats with oil bound washable distemper of approved brand and shade on wall surface including priming coat with distemper primer after throughly brooming the surface free from mortar drops and other foreign matter including preparing the surface even and sand paper smooth, cost of materials, labour, complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	105.91	73.00	
15	Providing and finishing external walls in two coats with waterproof cement paint of approved brand and shade to give an even shade after throughly brooming the surface to remove all dirt and loose powdered material, free from mortar drops and other foreign matter cost of materials, labour, complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	58.56	86.00	

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16	Providing and applying enamel metal paint two coats (excluding priming coat) over new steel or other metal surface brushing to give an even shade after cleaning oil, grease, dirt and other foreign matter, including cost of materials, labour, complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	29.43	84.00	
17	Providing and fixing Special make glazed Vitrified tiles (Granomite finish) of approved make, quality and colour of size 600x600x10mm thick fixed on existing flooring with a special roffe adhesive for flooring and skirting etc., complete including providing spears at required interval and removing stains etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	15.00	1216.00	
18	Providing and laying/fixing cement base, precast, pre polished cement concrete, designer tiles 25mm thick for flooring conforming to IS 1237 heavy duty tiles for flooring, treads of steps and landing, laid on a bed of 12mm thick cement mortar 1:3 mis finished with flush pointing using white cement, including cost of materials, including cutting, griding the edge to half/full round wherever required, labour, curing complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	5.16	1109.00	

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	...ding and fixing in position in cement ...crete 1:3:6 steel glazed windows and ...ventilators side hung/top hung fully openable as ...ther approved drawings using 2 angles of 25x33x3mm, weighting 1.419 kg/m both for outer and inner frames and central mullion section of size 25x46x3mm.weighing 2.28kg/m duly providngs T section 19x19x3mm weighting 0.839 kg/m for glazing of windows not morethan 34 cms. c to c including providing and fixing 4mm. thick reeded glass with teakwood beading of required size, all steel sections should confirm to IS 7452:1990, 4 nos of holdfasts of approved sixe, section should be cut to length welded and electrically grinded subdivising frames of unit shall be tenonned and revetted into the fames electrically. All the steel surface shall be throughly cleaned free of rust and painted with one coat of anti-corosive paint and finishing with two coats of ready mix paint of approved colour and make including cost of materials, fixtures, labour and HOM of machinery etc., complete as specifications and as per the direction of Engineer in-charge of the work.	Sqm	1.08	3607.00	
20	Providing and fixing pull and push type rolling shutters of approved make out of 18 guage, 75mm wide cold rolled steel laths of convex corrugation, with side guides and bottom rail, with interlocking arrangements for steel laths by means of alternate clips, suspension shaft with High tension coil type springs two numbers, mounted on specially designed pipe shaft, with bracket plates, guide channels, ball bearing arrangements, for inside & outside locking with push & pull operations complete including pulling hooks, 4Nos. handles with all fittings and accessories, painted with a coat of red lead paint (without top cover) cost of materials, labour, HOM of machinery complete as specifications and as per the direction of Engineer-in-charge of the work.	Sqm	6.30	2924.00	

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21	Providing, fabricating, assembling and fixing in position aluminium partitions using aluminium sections of mat finish or glassy finish in combination of plain grove, single grove and double grove as per requirements for the frames of overall size 63.5mm x 38.1mm. with thickness of 2mm. having section weight, plain sections 1.054kg/m, single grove thickness 1.95mm. section weight 1.094kg/m, double grove thickness 1.9mm section weight 1.094kg/m and bottom member 114.3 mm. x 44.45mm. thickness 3.18mm. weight 2.646 kg/m; aluminium louvres section of size 36.5mmx34.93mm 1.45mm. thick section weight 0.429kg/m; bottom portions provided with 12mm. thick prelaminated sheet both sides of approved colour lamination exterior grade upto 0.9m height, spacing of vertical member not exceeding 0.6 m. c to c; sections are cut to the required lengths, joints mitered and corners grinded subdividing frames tennoned and rivetted to the frames; the assembled frame stiffened with corner angles, stripped and fixed with screws, rawl plugs and teak wood gutties to R.C.C.columns on sides, R.C.C. lintels or beams at top and floor at bottom, including cutting chistelling and making good with cement mortar to match the surface; providing and fixing 5.5mm.	Sqm	7.20	3304.00	
22	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete. (internal work exposed on wall) - 25mm nominal OD pipes complete as specifications and as per the direction of Engineer-in-charge of the work.	Mtr	50.00	144.00	
23	Providing and fixing Chorinated Poly Venyl Chloride (CPVC) pipes conforming to IS 15778, having thermal stability for hot and cold water supply including all CPVC plain and brass threaded fittings including fixing the pipe with clamp at 1.00 mtr spacing. This includes jointing of pipes and fittings with one step CPVC solvent cement and testing of joints complete. (internal work exposed on wall) - 20mm nominal OD pipes complete as specifications and as per the direction of Engineer-in-charge of the work.	Mtr	50.00	138.00	

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	...ving water storage tanks made of virgin ...ner (LLDPE) with two layers outer Black or ...e and inner White layer of approved quality ...d make, conforming to I.S.I./ISO/SSI complete ...s specifications and as per the direction of Engineer-in-charge of the work.	Litre	2000.00	6.00	
25	purpose to dose sodium Bi-carbonate for enhances product water SS till the pre-filteration and SS from HPP to the premeter line termination point NRV's pressure relief valves, wherever needed the system will be on common SS base frame supply and manufacture of complete Reverse Osmosis plant stainless steel tank (2kl) Raw water tank (5kl) with stainless steel pipe line required for plant erection. complete as specifications and as per the direction of Engineer-in-charge of the work.	No	1.00	810000.00	
26	Supplying and wiring adopting loop system PVC Conduit/casing capping using 1100V grade, COPPER conducter flexible multistrand FRLSPVC insulted, 2 X1.55 q.mm Cable Confirming to the GTP, with a 6Amps flush type SP control switch shall be fixed on the existing plastic sheet/gang box, the other end of the wires shall be terminated with sufficient loose length in a wood / pvc round block, complete for each outlet. GROUP A b) Medium point above 3 MTr upto 6Mtr from tapping point to out let via switch complete as specifications and as per the direction of Engineer-in-charge of the work.	Point	6.00	232.00	
27	Long point above 6Mtr upto 10 Mtr from tapping point to out let via switch complete as specifications and as per the direction of Engineer-in-charge of the work.	Point	6.00	343.00	
28	Supplying and flush mountaing teak wooden box without front plank, made of not less than 12mm thick wood, after due groove cutting, finishing with necessary cement plastering etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Each	30.00	64.00	
29	(1.6.1) 12"x12"x3 (300x300x76mm) etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Each	18.00	110.00	
30	(1.6.3) 10"x"x3" (254x178x76mm) complete as specifications and as per the direction of Engineer-in-charge of the work.	Each	15.00	82.00	

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31	Supplying 4mm thick plastic sheet with necessary nitches for fixing switches, regulators etc., and fixing on existing wooden or metal box using N.F. screws etc/ complete as specifications and as per the direction of Engineer-in-charge of the work.	SqCM	33333.00	0.20	
32	Extra for Groove cutting in brick wall/CC floor to the suitable depth for concealing of Conduit/GI pipe and plastering, finishing upto wall surface complete upto 50mm conduit in brick wall complete as specifications and as per the direction of Engineer-in-charge of the work.	Mtr	30.00	20.00	
33	Supplying heavy gauge PVC conduit pipe 19/20 mm dia 2 mm thick with suitable sie bends, metal junction boxes adhesive paste etc., by groove cutting in the wall and fixing by bracing U or J hooks cement plastering up to the wall surface and run with 18 SWG GI fish wire run throughout the conduit wherever necessary etc., complete as specifications and as per the direction of Engineer in-charge of the work.	Mtr	25.00	53.00	
34	Supplying and fixing PBBC/Bakelte straight or slant batten holder and wiring with 60w/230 volts lamps etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Each	4.00	83.00	
35	Supplying patti type flurescent tube light fitting of '2 - suitable for 14 watts flurescent tube fitting, made out of M.S sheet and stove enameled with HF electonic ballast locking type brass contact holders mounted on double fold type sheet base fully wired for use on 230 volts AC. Supply including T5 lamp etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Each	4.00	559.00	
36	Wiring for lighting/power circuit using one FRLS PVC insulated 1100V graded, multistrand copper with low conductor resistance single core wire in open or concealed system of wiring with specified IS-694:1990 and confirming to GTP of GROUP-A1.5 sqmm etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Mtr	15.00	18.00	

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	...ing and fixing cast Aluminum round or ...ng type bulk head fitting with GI wire guard, ...cover with 60/100watts 230V GLS lamp etc., ...mplete as specifications and as per the ...ction of Engineer-in-charge of the work.	Each	8.00	707.00	
	Supplying, fixing, wiring, earth electrode for grounding conduit, I.C cutouts and other equipments on the meter board using 40mm dia 2.90mm thick GI pipe 2.5 mtr long buried round the pipe to complete depth. The connection from the pipe to the conduit etc., is to be established through GI wire of size as per ISI specification 7.3.3 of IS 732 using 12mm dia bolts, nuts, washers and check nuts etc., the pipe shall have 16 through holes of 122 mm dia etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	No	1.00	2580.00	
39	Supplying of 1.1 KV LT UG cable having aluminum conductor PVC insulated, extruted inner sheatherd, galvanized, steel strip (except 2CX10Sq.mm wire armoured) confirming to IS-3975:1990 (No.of strip indicated in GTP) & extruded PVC outer sheathed armoured cable with specified IS-1554 Part-1:1988 and confirming to GTP of GROUP-A etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Mtr	10.00	133.00	
40	Labour charges fo laying of 1.1 KV class UG cable in existing trench GI pipe/stoneware pipe /on wall/on pole as required in existing trench/duct etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Mtr	10.00	10.00	
41	Digging of trench of 0.6m deep x 0.50 mtr wide refilling the trench to the rewuired ground level and consolidating etc., complete for cutting road surface etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Mtr	5.00	80.00	
42	Supplying and fixing of class A (medium duty) GI of wall thickness not less than 3.25mm on pole/wall/drain crossing with necessary clamping arrangements for UG cable of 1.1 KV 40mm dia GI pipe etc., complete as specifications and as per the direction of Engineer-in-charge of the work.	Mtr	4.00	326.00	

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43	Supplying and fixing L.T cast iron pot heads suitable for 1.1 KV class UG cable filled with necessary bitumen/insulating compound complete with terminals, clamps, bolts, nuts and washers 165sqmm etc., complete as specifications and as per the direction of Engineer in-charge of the work.	No	1.00	265.00	

Signature of Contractor

Executive Engineer
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